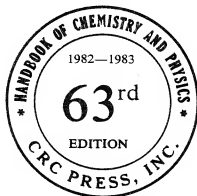


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CRC Handbook of Chemistry and Physics

A Ready-Reference Book of Chemical and Physical Data



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In collaboration with a large number of professional chemists and physicists whose assistance is acknowledged in the list of general collaborators and in connection with the particular tables or sections involved.



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Exhibit C

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PHYSICAL CONSTANTS OF INORGANIC COMPOUNDS (Continued)

No.	Name	Synonyms and Formulae	Mol. wt.	Crystalline form, properties and index of refraction	Density or spec. gravity	Melting point, °C	Boiling point, °C	Solubility, in grams per 100 cc			No.
								Cold water	Hot water	Other solvents	
b183	Boric acid ortho.....	Boracic acid. H_3BO_3	61.83	col. tric. 1.337, 1.461, 1.462	1.435 ^m	169 ± 1 tr to H_2BO_3	-11 H_2O , 300	6.35 ^m	27.6 ^m	28 ^m glyc; 0.0078 eth; 5.56 al; 20, 20 ^m MeOH; 1.92 ^m liq. NH_3 ; sl s aco	b276 b228 b229 c1
b184	tetra- (pyro).....	$\text{H}_2\text{B}_4\text{O}_7$	157.26	vitr or wh powd.				s	s	al s	
b185	fluor.....	HBF_4	87.81	col liq			d 130	s	s	al s	
b186	Berinoaminoborine	$\text{B}_2\text{H}_3\text{N}$	42.68	col liq		-66.5	76.2			s triborine tri- amine v al s HNO_3	c2 c3
b187	Boron	B.....	10.811	yel monoel or br amorph powd	2.34, 2.37 3.64	2300	2550	i	i	v al s HNO_3	c4 c5 c6
b188	arsenate.....	BAsO_4	149.73	wh cr tetrag.		subl co 700		v al s	1.4 ^m	al s; a inorg s	c7
b189	bromide, tri.....	BBr_3	250.54	col fum liq. n_D^{20} 1.5312	2.6431 ^m	-46	91.3 ± 0.25	d		al al, CCl_4	c8
b190	bromide, di-, iodide.....	BBrI_2	297.53	col liq			125	d	d		c9
b191	bromide, mono-, diodide	BBrI_2	344.53	col liq			180	d	d		c10
b192	(di-) bromide, mono-, pentahydride	$\text{Br}_2\text{H}_4\text{Br}$	106.67	col gas		-104	co 10	hyd to HBO_2 $\text{HBr} +$ H_2			c11 c12
b193	(tetra-) carbide.....	B_4C	55.26	blk rhbdr.	2.52	2350	>3500	i	i	al s; fus alk	c13
b194	chloride, tri.....	BCl_3	117.17	col fum liq. 1.419 ^m ; n_D^{20} 1.349 ^m		-107.3	12.5		d to HCl + H_2BO_3	d al	c14
b195	fluoride, tri.....	BF_3	67.81	col gas.	2.99 g/l	-128.7	-99.9	106 (762 mm)	d	d al; a conc H_2SO_4	c15 c16
b196	fluoride dihydrate.....	$\text{BF}_3 \cdot 2\text{H}_2\text{O}$	103.84	col liq; n_D^{20} 1.31498	1.6316 ^m	6		d	d	s eth, dioxan	c17
b197	hydride.....	Diborane, borothane, B_2H_6	27.67	col gas.	liq: 0.447 H_2 sol: 0.577 H_2	-165.5	-92.5	al s d to H_2BO_3 + H_2		d 1.67 al; s NH_4OH , conc H_2SO_4	c18 c19 c20 c21
b198	hydride.....	Dihydrotriborane, borobutane, B_3H_8	53.32	col gas, pois.	0.56 H_2	-120.8	16	al s, d		s bz; d al	c22 c23 c24
b199	hydride.....	Pentaborane, B_5H_{11}	63.13	col liq	0.66 ^m	-46.82	58.4	d		v s CS_2 ; al, eth br	c25 c26 c27 c28
b200	hydride.....	Hexaborane, B_6H_{12}	74.95	col liq	0.69 ^m	-65	69 ^m	d		d al; v CS_2 , bz, CCl_4	c29 c30 c31
b201	hydride.....	Decaborane, $\text{B}_{10}\text{H}_{18}$	122.22	wh cr	0.94 ^m	99.5	213	al s	d	al s HNO_3 ; d H_2SO_4 ; i KOH d H_2SO_4 , KOH	c32 c33 c34
b202	iodide, tri.....	BI_3	391.52	col pl, hygr.	3.35 ^m	49.9	210	d	d	al s PCl_5 , SCl_2 ; d al	c35 c36 c37
b203	nitride.....	BN	24.82	wh, hex.	2.25	subl co 3000		al s	al d	al s H_2O	c38 c39 c40
b204	oxide.....	B_2O_3	66.62	rhomb cr, 1.64, 1.61	2.46 ± 0.01	450 ± 2	co 1860	al s	s	al s, eth, chl, CS_2	c41 c42 c43
b205	oxide glass.....	B_2O_3	66.62	col, vitr 1.485	1.812 ^m	co 450		1.1 ^m	15.7 ^m	s al, s	c44 c45 c46
b206	phosphide.....	BP	41.78	amorph powd.		ign 200		i	i	al solv	c47 c48 c49
b207	trichloride.....	B_2S_3	258.50	yel-gray powd.				d	d	al s HNO_3 ; d H_2SO_4 ; i KOH d H_2SO_4 , KOH	c50 c51 c52
b208	(hexa-) silicide.....	BSi_6	92.95	blk cr	2.47			i	i	al s HNO_3 ; d H_2SO_4 ; i KOH d H_2SO_4 , KOH	c53 c54 c55
b209	(tri-) silicide.....	BSi_3	60.52	blk rhomb	2.52			i	i	al s HNO_3 ; d H_2SO_4 ; i KOH d H_2SO_4 , KOH	c56 c57 c58
b210	sulfide, penta.....	BS_5	181.94	col, tetrag.	1.85	390		d	d	al s PCl_5 , SCl_2 ; d al	c59 c60 c61
b211	sulfide, tri.....	BS_3	117.81	wh or vitr.	1.55	310		d	d	al s, eth	c62 c63 c64
b212	Borotungstic acid	$\text{H}_2\text{BW}_6\text{O}_{26} \cdot 30\text{H}_2\text{O}$	3402.49	tetr, cr	3	45-51		s	s	al s, eth	c65 c66 c67
b213	Bromic acid	HBrO_3	128.92	known in sol only, col or yelab		d 100		v s	d		c68 c69 c70
b214	Bromine	Br_2	159.806	dk red liq, 1.661, 3.119 ^m		-7.2	58.78	4.17 ^m , 3.58 ^m	3.53 ^m	v s al, eth, chl, CS_2	c71 c72 c73
b215	azide.....	Bromoside, BrN_3	121.93	cr, red liq		co 45	exp			s eth, KI; al s bz, lig	c74 c75 c76
b216	chloride.....	BrCl	115.36	red-col liq or gas.		co -66 to 10	co 5	s d		s eth, CS_2	c77 c78 c79
b217	fluoride, mono.....	BrF	98.91	red-br gas.		d -33	-20				c80 c81 c82
b218	fluoride, penta.....	BrF_5	174.90	col gas.	2.466 ^m	-61.3	40.5	d	d		c83 c84 c85
b219	fluoride, tri.....	BrF_3	136.90	col-gray-yel liq.	2.49 ^m	(-2) 8.8	135	d viol. to O_2 , HOBr , H_2F , HBrO_3		d alk	c86 c87 c88
b220	hydrate.....	$\text{Br}_2 \cdot 10\text{H}_2\text{O}$	339.97	red oct.	1.49	d 6.8		s			c89 c90 c91
b221	oxide, di.....	Br_2O_2	111.91	lt yel		d 0					c92 c93 c94
b222	oxide, mono.....	Br_2O	175.82	dk br		-17 to -18				s, d CCl_4	c95 c96 c97
b223	(tri-) oxide, oct.....	Br_3O_8 (or Br_3O_9).....	367.72	wh		-40					c98 c99 c100